: 1	UTILITY		Attorney Do	cket No.	132442	2		
PATEN	T APPLICATIO	N	First Invento	nr.	Bernar	rd James Re	nggli	
TRA	ANSMITTAL		Title				OR FLADE ENGIN	E
(Only for new nonpr	ovisional applications unde 1.53(b)	r 37 CFR	Express Ma			298648455		
	ATION ELEMENT concerning utility patent appli		ADDRESS	то:	Commissi PO Box 14	Patent Application ioner for Patents 450 ia, VA 22313-145	PTO 15	
2. Applicant claims small entity status.  See 37 CFR 1.27.  3. Specification [Total Pages 13 ]  (preferred arrangement set forth below)  - Descriptive title of the invention  - Cross Reference to Related Applications  - Statement Regarding Fed sponsored R & D  - Reference to sequence listing, a table,  or a computer program listing appendix  - Background of the Invention  - Brief Summary of the Invention  - Brief Description of the Drawings (if filed)  - Detailed Description  - Claim(s)  - Abstract of the Disclosure  4. Drawing(s) (35 U.S.C. 113) [Total Sheets 5]  5. Declaration & Power of Attorney [Total Pages 3]  a. Newly executed (original or copy)  b. Copy from a prior application (37 CFR 1.63 (d))  (for continuation/divisional with Box 17.  completed)  i. DELETION OF INVENTOR(S)  Signed statement attached deleting inventor(s)  named in the prior application, see 37 CFR  1.63(d)(2) and 1.33(b).  6. Application Data Sheet. See 37 CFR 1.76				Computer Program (Appendix)  Nucleotide and/or Amino Acid Sequence Submission (if applicable, all necessary)  a.				
Customer Number o	or Bar Code Label	(Insert C	23465 ustomer No. or Attach ba	ar code label here)	or	Corre	spondence address below	
Name	John S. Beulick							
	Armstrong Teasdale LL	P						_
Address	One Metropolitan Squa	re, Suite 26	500			<u> </u>		
City	St. Louis		State	мо		Zip Code	63102	_
Country	us / W	/ /	Telephone 3	14.621.5070		Fax	314.621.5065	
Name (Print/Type)	Robert B. Reeser, H.	AA	Registration N	o. (Attorney/Ag	ent)		45,548	
Signature  Certificat f Express Mail  I certify that the documents listed on this form are being deposited with the United States Postal Service "Express Mail Post Office to Address service under 37 C.F.R. § 1.10 on the date indicated above in an envelope addressed to: Mail Stop Patent Application, Commissioner for Patent P.O. Box 1450, Alexandria, VA 22313-1450.						October 31, 2003  ost Office to Addressee Commissioner for Pater	nts,	
Robert B. Reeser, III						October 31, 200	3	
			(Signature of Person Mailing Correspondence)			Date	$\neg$	

PTO/SB/17 (10-03)
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October 31, 2003

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éctive 10/01/2003. Patent fees are subject to annual revision.

Applicant claims small entity status. See 37 CFR 1.27

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Complete if Known				
Application Number				
Filing Date				
First Named Inventor	Bernard James Renggli			
Examiner Name	_			
Art Unit				
Attorney Docket No.	132442			

Check Credit card Money Other None  Deposit Account:  Deposit Account Number Deposit Account Number Deposit Account Armstrong Teasdale LLP  Armstrong Teasdale LLP  Armstrong Teasdale LLP  3. ADDITIONAL FEES Large Entity   Small Entity Fee Fee Fee Fee Fee Fee Code (\$) 1051 130 2051 65 Surcharge - late filing fee or cover sheet	
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Armstrong   Associate   D   1032 30   2032 23 Outstalige - late provisional limit let of	
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The Director is authorized to: (check all that apply)	
Charge fee(s) indicated below Credit any overpayments 1812 2,520 For filing a request for ex parte reexamination	
Charge any additional fee(s) or any underpayment of fee(s)  1804 920* Requesting publication of SIR prior to Examiner action	
Charge fee(s) indicated below, except for the filing fee to the above-identified deposit account.	
FEE CALCULATION 1251 110 2251 55 Extension for reply within first month	
1. BASIC FILING FEE 1252 420 2252 210 Extension for reply within second month	
Large Entity Small Entity 1253 950 2253 475 Extension for reply within third month	
Fee Fee Fee Fee Fee Description Fee Paid 1254 1.480 2254 740 Extension for reply within fourth month	
Code (\$) Code (\$)  1001 770 2001 385 Utility filing fee [770 00 1] 1255 2,010 2255 1,005 Extension for reply within fifth month	
1002 340 2002 170 Design filing fee 770.00 1401 330 2401 165 Notice of Appeal	
1003 530 2003 265 Plant filing fee 1402 330 2402 165 Filing a brief in support of an appeal	
1004 770 2004 385 Reissue filing fee 1403 290 2403 145 Request for oral hearing	
1005 160 2005 80 Provisional filing fee 1451 1,510 Petition to institute a public use proceeding	
SUBTOTAL (1) (\$) 770.00 1452 110 2452 55 Petition to revive - unavoidable 1453 1,330 2453 665 Petition to revive - unintentional	
2. EXTRA CLAIM FEES FOR UTILITY AND REISSUE 1501 1 320 2501 555 UNIVERSITY (AS FRIENDS)	
Fee from 1301 1,330 2301 803 0tility issue fee (of feissde)  Extra Claims below Fee Paid 1502 480 2502 240 Design issue fee	
Total Claims20** = X =   1503 640 2503 320 Plant issue fee	
Independent - 3** = X 1460 130 1460 130 Petitions to the Commissioner	$\neg$
Multiple Dependent 1807 50 1807 50 Processing fee under 37 CFR 1.17(q)	
Large Entity   Small Entity   1806   180   1806   180   Submission of Information Disclosure Stmt	
Fee Fee Code (\$) Code (\$) Recording each patent assignment per property (times number of properties)	, [
1202 18 2202 9 Claims in excess of 20 1809 770 2809 385 Filing a submission after final rejection	-
1201 86 2201 43 Independent claims in excess of 3 (37 CFR 1.129(a))	
1203 290 2203 145 Multiple dependent claim, if not paid 1810 770 2810 385 For each additional invention to be	1
1204 86 2204 43 ** Reissue independent claims examined (37 CFR 1.129(b)) examined (37 CFR 1.129(b)) over original patent 1801 770 2801 385 Request for Continued Examination (RCE)	
over original patent 1801 770 2801 385 Request for Continued Examination (RCE)  1205 18 2205 9 ** Reissue claims in excess of 20 1802 900 1802 900 Request for expedited examination	
and over original patent of a design application	
SUBTOTAL (2) (\$) Other fee (specify)	
**or number previously paid, if greater; For Reissues, see above *Reduced by Basic Filing Fee Paid SUBTOTAL (3) (\$) 40.00	
SUBMITTED BY (Complete (if applicable))	
Name (Print/Type) Robert B. Repser A Registration No. 45,548 Telephone 314/621-5070	

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This collection of information is required by 37 CFR 1.17 and 1.27) The information is required to obtain or retain a benefit by the public which is to file (and by the USPTO to process) an application. Confidentiality is governed by 35 U.S.C. 122 and 37 CFR 1.14. This collection is estimated to take 12 minutes to complete, including gathering, preparing, and submitting the completed application form to the USPTO. Time will vary depending upon the individual case. Any comments on the amount of time you require to complete this form and/or suggestions for reducing this burden, should be sent to the Chief Information Officer, U.S. Patent and Trademark Office, U.S. Department of Commerce, P.O. Box 1450, Alexandria, VA 22313-1450. DO NOT SEND FEES OR COMPLETED FORMS TO THIS ADDRESS. SEND TO: Commissioner for Patents, P.O. Box 1450, Alexandria, VA 22313-1450.